



# Evolving H.E.M.

Emmett Romine – SVP, Business Development

[eromine@powerley.com](mailto:eromine@powerley.com)

# HOME ENERGY MANAGEMENT

```
graph TD; A[HOME ENERGY MANAGEMENT] --- B[REAL-TIME ENERGY]; B --- C[DISTRIBUTED ENERGY RESOURCES]; B --- D[ENERGY STORAGE AND SOLAR]; B --- E[HVAC OPTIMIZATION]; C --- F[LOAD MONITORING]; C --- G[ELECTRIC VEHICLE]; D --- H[HOME AUTOMATION]; D --- I[DISAGGREGATION]; E --- J[SMART THERMOSTATS]; E --- K[DEMAND RESPONSE]
```

REAL-TIME ENERGY

DISTRIBUTED ENERGY  
RESOURCES

ENERGY STORAGE  
AND SOLAR

HVAC  
OPTIMIZATION

LOAD MONITORING

HOME AUTOMATION

SMART THERMOSTATS

ELECTRIC VEHICLE

DISAGGREGATION

DEMAND RESPONSE

A dark, blue-tinted photograph of a modern building's exterior. The building has a grid-like facade of large panels. A tree is visible on the right side, and a ramp with metal railings is in the foreground. The text is overlaid in white.

A new relationship with Consumers is possible,  
provided we solve the following:

1. Reorient our focus
2. Connect the disconnected
3. Increase the velocity of innovation

Fragmented customer experiences      Disconnected data and Intelligence      Missed Revenue Opportunities      Lower Customer Satisfaction      Operational Inefficiencies - Cost to Serve



ENERGY EFFICIENCY



DEMAND RESPONSE



DER



NEW REVENUE



BRAND MARKETING



CUSTOMER SERVICE



AMI

**Focusing on utility problems rather than the consumer**

# CONSUMER VALUE PROPOSITION

Unified Customer Experience

Cross-Functional Intelligence

New Revenue Opportunities

Improved Customer Sat

Improved Cost to Serve



ENERGY EFFICIENCY



DEMAND RESPONSE



DER



NEW REVENUE



BRAND MARKETING



CUSTOMER SERVICE



AMI

**Reorienting focus and breaking down the silos**

SMART GRID

SMART HOME

DISCONNECTED

SILOED SOLUTIONS  
WITH LIMITED ABILITY TO ACT

DISCONNECTED FROM  
THE SMART HOME

# CONNECTING TECHNOLOGIES: EXPONENTIAL VALUE



# THE BATTLE AHEAD

**Strengthen  
customer  
relationships**

**Protect core  
business**

**Grow new  
revenues**



● Leading Utilities

● Lagging Utilities

● Industry Outsiders



# INNOVATE FASTER, TOGETHER

---



**Traditional Program**

5 Years



**DTE Energy 1<sup>st</sup> Gen**

3 Years



**DTE Energy 2<sup>nd</sup> Gen**

1 Year



**Pilot Program**

8 Weeks

# CREATING VALUE AND ENGAGEMENT

---

## Mobile Banking

18 sessions/mth

1.5 mins/sessions

Source: Malauzai 2015  
375K banking customers

## Energy Management

16 sessions/mth

.78 mins/sessions

Source: DTE Insight  
2014 - present

## Smart Home + Smart Grid

72 sessions/mth

2 mins/sessions

Source: DTE Pilot/110 users

# CONNECT THE SMART GRID TO THE SMART HOME

---

ENERGY  
MANAGEMENT



 *powerley*

HOME  
AUTOMATION



# Questions?

[eromine@powerley.com](mailto:eromine@powerley.com)